



MEMORANDUM

DATE: May 22, 2020

TO: Joseph Moore | GMA Architects

FROM: Lacy Brown, Ph.D., P.E. | DKS Associates
Clive Lara, EI | DKS Associates



SUBJECT: Salem Cottage Street Transportation Planning Rule Analysis Project #P20082-000

This memorandum presents the findings of an evaluation of potential traffic impacts associated with a proposed zone change for two parcels (905 and 925 Cottage Street, each 0.15 acres) in Salem, Oregon. The lots are currently both zoned as Single Family Residential (RS) and the applicant desires to change the zoning to Commercial Office (CO) to allow for the development of multifamily units and office space. The two lots will not be combined. The proposed zone change must be in accordance with Oregon Administrative Rule (OAR) 660-012-0060, the Transportation Planning Rule (TPR). The intent of the TPR (OAR 660-12-0060) is to ensure that future land use and traffic growth is consistent with transportation system planning and does not create a significant effect on the surrounding transportation system beyond currently allowed uses. The definition of a significant effect varies by jurisdiction and no such definition is provided in the City of Salem code. According to the Oregon Highway Plan (OHP), a net increase of 400 daily trips qualifies as a significant effect. While the OHP is not applicable to city streets, it provides a reasonable estimate of a significant effect for TPR analysis purposes.

This memorandum documents the expected trip generation of the reasonable worst-case development potential under existing and proposed zoning, and whether the proposed zone change will create a significant effect on the transportation system.

EXISTING ZONING (RS) TRIP GENERATION

Under the current RS zoning, residential land uses such as single-family and multi-family housing is allowed as well as day care facilities and religious assemblies.¹ A summary of the trip generation rates for the different allowable land uses permitted under the existing RS zoning is presented in Table 1.²

TABLE 1: TRIP GENERATION RATES FOR SELECTED ALLOWED LAND USES UNDER RS ZONING

LAND USE (ITE CODE)	UNITS	WEEKDAY TRIP GENERATION RATES		
		DAILY	AM PEAK HOUR	PM PEAK HOUR
SINGLE-FAMILY DETACHED HOUSING (210)	DU	9.44	0.74	0.99
MULTI-FAMILY HOUSING (LOW RISE) (220)	DU	7.32	0.46	0.56
CHURCH (560)	KSF	6.95	0.33	0.49
DAY CARE CENTER (565)	KSF	47.62	11.00	11.12

^a DU = Dwelling Unit

^a KSF = 1,000 square-feet

The two lots are currently occupied by an approximately 7,000 square-foot church and 1,900 square-foot single family house.

For the reasonable worst-case development under existing zoning, the existing 7,000 church building was assumed for 905 Cottage Street and an in-home daycare facility was assumed for 925 Cottage Street. Table 2 on the following shows the reasonable worst-case trip generation for existing RS zoning. As shown, the 905 Cottage Street parcel could generate up to 49 daily trips and the 925 Cottage Street parcel could generate up to 90 daily trips.

¹ A list of permitted land uses for RS zoning can be found in the Salem Revised Code, Chapter 511.

² Trip generation estimates calculated using average rates from ITE Trip Generation Manual, 10th Edition

TABLE 2: REASONABLE WORST-CASE LAND USE AND TRIP GENERATION FOR EXISTING RS ZONING

LAND USE (ITE CODE)	SIZE	WEEKDAY TRIP GENERATION		
		DAILY	AM PEAK HOUR	PM PEAK HOUR
905 COTTAGE STREET				
CHURCH (565)	7.0 KSF ^a	49	2	3
Total		49	2	3
925 COTTAGE STREET				
DAY CARE (565)	1.9 KSF ^a	90	21	21
Total		90	21	21

^a KSF = 1,000 square-feet

PROPOSED ZONING (CO) TRIP GENERATION

Under the proposed Commercial/Office (CO) zoning, a variety of permitted land uses could be developed on the property.³ For the purposes of identifying the reasonable worst case trip generation for the proposed CO zoning, only the highest trip generation land uses are shown:

- Eating establishments⁴
- Retail (newsstands and caterers only)
- Office
- Day care
- Multi-family housing

A summary of the trip generation rates for different land uses permitted under the proposed CO zoning are presented in Table 3 on the following page.⁵

³ A list of permitted land uses for CO zoning can be found in the Salem Revised Code, Chapter 521.

⁴ Per Table 521-1 in Salem Revised Code, eating establishments may not occupy more than 25 percent of the floor area of a 1 story building or more than 50 percent of the floor area of a 2 or more story building

⁵ Trip generation estimates calculated using average rates from ITE Trip Generation Manual, 10th Edition

TABLE 3: TRIP GENERATION RATES FOR SELECTED ALLOWED LAND USES UNDER CO ZONING

LAND USE (ITE CODE)	UNITS	WEEKDAY TRIP GENERATION RATES		
		DAILY	AM PEAK HOUR	PM PEAK HOUR
MULTI-FAMILY RESIDENTIAL (220)	DU ^b	7.32	0.46	0.56
DAY CARE CENTER (565)	KSF ^a	47.62	11.00	11.12
SMALL OFFICE BUILDING (712)	KSF ^a	16.19	1.92	2.45
MEDICAL-DENTAL OFFICE BUILDING (720)	KSF ^a	34.80	2.78	3.46
COFFEE/DONUT SHOP WITHOUT DRIVE-THRU (936)	KSF ^a	754.55	101.14	36.31

^a KSF = 1,000 square-feet; ^b DU = Dwelling Unit

It should be noted that the existing parking lots located at the back of both parcels are currently not up to code. With redevelopment of the parcels, City of Salem parking area dimension requirements would need to be followed, allowing for at most 5 parking spaces in each property.⁶ City of Salem requires a property to provide a minimum number of off-street parking depending on the land use. Although CO zoning allows for up to 60% lot coverage and 70 feet of building height, the 5 parking spaces allow for only a limited square-footage of office or commercial development. Table 4 summarizes the required minimum number of off-street parking spaces for selected land uses.⁷

⁶ Minimum Off-Street Parking Area Dimensions are provided in Table 806-6 in Salem Revised Code.

⁷ Minimum Off-Street Parking requirements are provided in Table 806-1 in Salem Revised Code.

TABLE 4: CITY OF SALEM MINIMUM OFF-STREET PARKING REQUIREMENTS

LAND USE	MINIMUM PARKING SPACES	MAXIMUM SQUARE FOOTAGE PER 5 PARKING SPACES
EATING AND DRINKING ESTABLISHMENTS	1 per 250 square-feet	1,250 square-feet
OFFICE	1 per 350 square feet	1,750 square-feet
MULTI-FAMILY HOUSING	None (site located within ¼ mile of Core Network)	N/A
DAY CARE CENTER	1 for day care serving 1 - 12 persons	N/A
	2 for day care serving 13 - 18 persons	
	3 for day care serving 19 - 16 persons	
	4 for day care serving 27 or more persons	

Because of both the off-street parking requirements and floor areas coverage conditional use requirements for eating establishments, a fast food restaurant or coffee shop is an unlikely land use at this location. The highest potential generator of trips on both parcels is a daycare center, which is not limited in size based on the parking requirements. This is a very conservative estimate as it is unlikely that a daycare would occupy both parcels. The assumptions for reasonable worst-case development potential on both parcels under CO zoning is shown in Table 5 on the following page.

TABLE 5: REASONABLE WORST-CASE LAND USE AND TRIP GENERATION FOR PROPOSED CO ZONING

LAND USE (ITE CODE)	SIZE	WEEKDAY TRIP GENERATION		
		DAILY	AM PEAK HOUR	PM PEAK HOUR
905 COTTAGE STREET				
DAY CARE CENTER (565)	5.0 KSF ^{a,b}	238	55	56
Total Existing Trips (RS zoning)		49	2	3
Net Increase (Proposed – Existing)		189	53	53
925 COTTAGE STREET				
DAY CARE (565)	1.9 KSF ^a	90	21	21
Total Existing Trips (RS zoning)		90	21	21
Net Increase (Proposed – Existing)		0	0	0

^a KSF = 1,000 square-feet; ^b 5,000 SF is a reasonable size based on other daycare facilities in Salem and the need for dedicated play areas for this land use

As shown, full buildout of the properties under the proposed CO zoning could generate up to 189 net new daily trips at the 905 Cottage Street property and zero (0) net new daily trips at the 925 Cottage Street property. These values represent the reasonable worst-case trip generation produced by land uses allowed under the proposed CO zoning.

TRANSPORTATION PLANNING RULE FINDINGS

After evaluating the reasonable worst-case development potential of both the existing (RS) and proposed (CO) zoning, the proposed zone change will result in a maximum net increase of 189 trips per day. The expected net increase in daily trips is less than 400, which is a reasonable estimate of the threshold for a “significant effect”. As such, the proposed zone change is not expected to have a significant effect on the surrounding transportation system and the Transportation Planning Rule requirements satisfied.

PLANNED DEVELOPMENT TRIP GENERATION

The applicant is planning to renovate the existing buildings to include 15 apartment units at the 905 Cottage Street property and 1,050 square-feet of office space plus one apartment unit at the 925 Cottage Street property. Table 6 shows the estimated trip generation for the planned development. As shown, the trip generation associated with the planned development is significantly less than the reasonable worst-case on both parcels.

TABLE 6: PLANNED DEVELOPMENT TRIP GENERATION

LAND USE (ITE CODE)	SIZE	WEEKDAY TRIP GENERATION		
		DAILY	AM PEAK HOUR	PM PEAK HOUR
905 COTTAGE STREET				
MULTIFAMILY HOUSING (LOW-RISE) (220)	15 DU ^a	110	77	78
925 COTTAGE STREET				
MULTIFAMILY HOUSING (LOW-RISE) (220)	1 DU ^a	7	0	1
SMALL OFFICE BUILDING	1.05 KSF ^a	17	2	3

^a DU = Dwelling Unit

^a KSF = 1,000 square-feet

SUMMARY AND RECOMMENDATION

The applicant is requesting a zone change on two 0.15-acre parcels in Salem, Oregon located at 905 and 925 Cottage Street. The proposed change in zoning from Single Family Residential (RS) to Commercial Office (CO) would result in an estimated reasonable worst-case daily trip increase of 189 trips on the 905 Cottage Street property and zero (0) net new daily trips at the 925 Cottage Street property.

The requirements of Oregon Administrative Rule (OAR) 660-012-0060, the Transportation Planning Rule (TPR), must be met for proposed changes in land use zoning. The intent of the TPR (OAR 660-12-0060) is to ensure that future land use and traffic growth is consistent with transportation system planning and does not create a significant effect on the surrounding transportation system beyond currently allowed uses.

Based on the reasonable worst-case trip generation evaluation, the proposed zone change would result in a daily increase of less than 400 trips at each property. Therefore, even under the most conservative assumptions of potential development, it can be concluded that the proposed zone change will not significantly impact and would cause “no further degradation” to the City of Salem transportation system. The number of additional daily and peak hour trips due to the proposed zone change is not anticipated to significantly impact transportation facilities near the project site and therefore, complies with TPR requirements.

Please let me know if you have any questions or comments.